### REMARKS

Claims 14 and 15 have been canceled herein. Claims 18 and 24 stand rejected under 35 USC 112. Claims 12, 13, and 16 stand rejected under 35 USC 102 as being anticipated by Montgomerie (GB 1042386). Claims 20 and 23 stand rejected under 35 USC 103 as being unpatentable over Montgomerie (GB 1042386) in view of Austin (US 4564537), or Brown (CH 286241). Claims 17, 18, 21, 22, and 24 stand rejected under 35 USC 103 as being unpatentable over Montgomerie (GB 1042386) in view of Austin (US 4564537) and/or Yazaki (US 3941087) and further in view of Brown (US 5083606). Applicant has made amendments to the claims supported at least in part by paragraph 16, 20, and 39 of the originally filed substitute specification. No new matter has been added.

# Response to Rejections Under Section 112:

Applicant has amended claim 18 to provide sufficient antecedent basis for claims 18 and 24.

## Response to Rejections Under Section 102:

Applicant has amended claim 12 in response to Examiner's remarks regarding "biocidal," which are appreciated. The new wording is taken from paragraph 16 of the originally filed substitute specification. Newly amended claim 12 now claims in part:

a second **toxically acting** layer arranged on a portion of the inside surface of the tube wherein the toxically acting layer reduces formation and growth of organic substances on the inside surface of the tube through a toxic effect on organic substances.

Montgomerie does not teach a toxically acting material. Applicant further claims in part:

a second toxically acting layer arranged on a portion of the inside surface of the tube...wherein the portion of the inside surface of the tube is located remote from an upper most portion of the inside surface of the tube when the tube is oriented for operation.

Montgomerie teaches a coating for the entire inner and/or outer surface of the tube. Neither Montgomerie nor any other prior art presented teach "a second toxically acting layer arranged on a portion of the inside surface of the tube," nor do they teach that the portion "is located remote from an upper most portion of the inside surface of the tube when the tube is oriented for

operation." Applicant respectfully requests the 35 USC 102 rejection of claim 12, and claim 13, which depends from and include all the limitations of claim 12, be withdrawn.

Similarly, in currently amended claim 16 Applicant claims in part:

a second toxically acting layer is arranged on a portion of the inside surface of the tube wherein the toxically acting layer reduces formation and growth of organic substances on the inside surface of the tube through a toxic effect on organic substances, and wherein the portion of the inside surface of the tube is located remote from an upper most portion of the inside surface of the tube when the tube is oriented for operation.

Montgomerie does not teach a toxically acting material, and Montgomerie teaches a coating for the entire inner and/or outer surface of the tube. Neither Montgomerie nor any other prior art presented teach "a second toxically acting layer arranged on a **portion** of the inside surface of the tube," nor do they teach that the portion "is **located remote from an upper most portion** of the inside surface of the tube when the tube is oriented for operation." Applicant respectfully requests the 35 USC 102 rejection of claim 16, based on Montgomerie, be withdrawn.

# Response to Rejections Under Section 103:

Claim 20 depends from claim 12 and thus contains all the limitations of claim 12. As noted above, Montgomerie does not teach all the limitations of claim 12, and thus Austin or Brown must supply the missing limitations of claim 12 before reaching the merits of claim 20. Neither Austin nor Brown teaches or suggests those limitations, and thus the combination of Montgomerie, Austin and Brown does not teach or suggest Applicant's claim 20. Applicant respectfully requests the 35 USC 102 rejection of claim 20, based on Montgomerie, Austin, and Brown be withdrawn.

Claim 23 depends from claim 16, and thus contains all the limitations of claim 16. As noted above, Montgomerie does not teach all the limitations of claim 12, and thus Austin or Brown must supply the missing limitations of claim 16 before reaching the merits of claim 23. Neither Austin nor Brown teaches or suggests those limitations, and thus the combination of Montgomerie, Austin and Brown does not teach or suggest Applicant's claim 23. Applicant respectfully requests the 35 USC 102 rejection of claim 23, based on Montgomerie, Austin, and Brown be withdrawn.

Claims 17 and 21 depend from claim 16 and thus contains all the limitations of claim 16. As noted above, Montgomerie does not teach all the limitations of claim 16, and thus Austin, Yazaki, or Brown must supply the missing limitations of claim 16 before reaching the merits of claim 17 or 21. Neither Austin, Yazaki, nor Brown teaches or suggests those limitations, and thus the combination of Montgomerie, Austin, Yazaki and Brown does not teach or suggest Applicant's claim 17 or 21. Further, in claim 17 Applicant claims a tube "such that the tube weld seam is located at an upper most position of the tube cross section when the tube is in operation." The weld in Yazaki is at the top of the figure simply for illustrative purposes only. There is no teaching or suggestion in Yazaki regarding the orientation of the weld "when the tube is in operation." Finally, in claim 21 Applicant claims a tube "wherein the portion of the inside surface of the tube starts at the tube's three o'clock position and ends at the tube's nine o'clock position." The cited prior art references teach fully coated surfaces, thus they do not teach or suggest this limitation of claim 21. Applicant respectfully requests the 35 USC 102 rejection of claim 17, and claim 21, which depends from and includes all the limitations of claim 17, based on Montgomerie, Austin, Yazaki, and Brown be withdrawn.

In currently amended claim 18 Applicant claims in part:

a second toxically acting layer is arranged on a portion of the inside surface of the tube wherein the toxically acting layer reduces formation and growth of organic substances on the tube inner surface through a toxic effect on organic substances, and wherein the portion of the inside surface of the tube is located remote from the weld seam.

As has been noted above, Montgomerie does not teach a toxically acting material, and Montgomerie teaches a coating for the entire inner and/or outer surface of the tube. Montgomerie does not teach or suggest "a second toxically acting layer arranged on a portion of the inside surface of the tube," or that the portion "is located remote from the weld seam." Thus, Austin, Yazaki, or Brown must supply these missing limitations. Neither Austin nor Yazaki nor Brown teaches or suggests these limitations, and thus the combination of Montgomerie, Austin, Yazaki, and Brown does not teach Applicant's claim 18. Further, in claim 18, Applicant claims a tube "such that the tube weld seam is located at an upper most position of the tube cross section when the tubes are in operation." The weld in Yazaki is at the top of the figure simply for illustrative purposes only. There is no teaching or suggestion in Yazaki

Serial No. 10/588,351

Atty. Doc. No. 2003P17919WPUS

regarding the orientation of the weld "when the tube is in operation." Finally, in claim 22 Applicant claims a tube "wherein the portion of the inside surface of the tube **starts** at the tube's three o'clock position **and ends** at the tube's nine o'clock position." The cited prior art references teach fully coated surfaces, thus they do not teach or suggest this limitation of claim 22. Applicant respectfully requests the 35 USC 102 rejection of claim 18, and claims 22 and 24, which depend from and contain all the limitations of claim 18, based on Montgomerie, Austin, Yazaki, and Brown be withdrawn.

#### Conclusion

For the foregoing reasons, it is respectfully submitted that the rejections set forth in the outstanding Office Action are inapplicable to the present claims. Accordingly, Applicant respectfully requests that the Examiner reconsider the rejections and timely pass the application to allowance. All correspondence should continue to be directed to our below-listed address. Please grant any extensions of time required to enter this paper. The commissioner is hereby authorized to charge any appropriate fees due in connection with this paper, including fees for additional claims and terminal disclaimer fee, or credit any overpayments to Deposit Account No. 19-2179.

Respectfully submitted,

Dated: 10/28/18

John P. Musone

Registration No. 44,961

(407) 736-6449

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, New Jersey 08830